Safety Data Sheet

Chromatography Solvent (Petroleum Ether/Acetone)

CAROLINA®
www.carolina.com

Section 1 Product Description

Product Name:	Chromatography Solvent (Petroleum Ether/Acetone)
Recommended Use:	Science education applications
Synonyms:	Petroleum Ether: Acetone Solution
Distributor:	Carolina Biological Supply Company 2700 York Road, Burlington, NC 27215 1-800-227-1150
Chemical Information:	800-227-1150 (8am-5pm (ET) M-F)
Chemtrec:	800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER

Highly flammable liquid and vapor. Causes serious eye irritation. May cause genetic defects. May cause cancer. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

GHS Classification:
Germ Cell Mutagenicity Category 1B, Carcinogenicity Category 1B, Aspiration Hazard Category 1, Serious Eye Damage/Eye Irritation Category 2, Hazardous to the aquatic environment - Acute Category 2, Hazardous to the aquatic environment - Chronic Category 2, Acute Toxicity - Inhalation Gas Category 5, Acute Toxicity - Oral Category 5

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Petroleum ether	8032-32-4	90
Acetone	67-64-1	10

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation:	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact:	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Ingestion:	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Section 5 Firefighting Procedures

Extinguishing Media:	Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection:	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards:	Extremely flammable. Risk of explosion if heated under confinement.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area.
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area. Collect spillage.

Section 7 Handling and Storage

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/…/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Keep away from ... (incompatible materials to be indicated by the manufacturer). Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapor/spray. Keep container tightly closed in a cool, well-ventilated place.

Storage: Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8 Protection Information

	ACGIH		OSHA PEL	
Chemical Name	**(TWA)**	**(STEL)**	**(TWA)**	**(STEL)**
Petroleum Ether	N/A	N/A	(Vacated) 300 ppm 1,350 mg/m3	(Vacated) 400 ppm 1,800 mg/m3
Acetone	500 ppm TWA	750 ppm STEL	1000 ppm TWA; 2400 mg/m3 TWA	N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Respirator Type(s): NIOSH approved air purifying respirator with organic vapor cartridge.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile

Section 9 Physical Data

Formula: See Section 3
Molecular Weight: N/A
Appearance: Colorless Liquid
Odor: Strong Gasoline-like
Odor Threshold: No data available
pH: No data available
Melting Point: < -73 C
Boiling Point: 20 - 75 C
Flash Point: -20 C
Flammable Limits in Air: (Petroleum Ether) LEL: 1.1% UEL:

Vapor Pressure: N/A
Evaporation Rate (BuAc=1): 6.82 (Pet.Ether)
Vapor Density (Air=1): 2.5 (Pet. Ether)
Specific Gravity: 0.6 (Pet. Ether)
Solubility in Water: Practically Insoluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: 90-100%

Safety Data Sheet

Section 10 Reactivity Data

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Temperatures above flash point in combination with sparks, open flames, or other sources of ignition.
Incompatible Materials:	Strong oxidizing agents, Caustics (bases), Peroxides, Strong acids, Oxidizing materials, Halogens
Hazardous Polymerization:	Will not occur

Section 11 Toxicity Data

Routes of Entry Inhalation, Ingestion, and Skin contact.
Symptoms (Acute): Eye disorders
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum ether	8032-32-4	Oral LD50 Rat > 4300 mg/kg Oral LD50 Mouse > 4300 mg/kg		INHALATION LC50 Rat > 1400 ppm
Acetone	67-64-1	Oral LD50 Mouse 3000 mg/kg	Dermal LD50 Rabbit 20000 mg/kg	

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Acetone	67-64-1	Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity:	Evidence of a mutagenic effect.
Teratogenicity:	No evidence of a teratogenic effect (birth defect).
Sensitization:	No evidence of a sensitization effect.
Reproductive:	No evidence of negative reproductive effects.
Target Organ Effects:	
Acute:	Central Nervous System, Cardiovascular system
Chronic:	Male Reproductive System

Section 12 Ecological Data

Overview:	Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility:	No data
Persistence:	Evaporation into atmosphere, Biodegradation
Bioaccumulation:	No data
Degradability:	No data
Other Adverse Effects:	No data

Chemical Name	CAS Number	Eco Toxicity
Petroleum ether	8032-32-4	72 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 4700 MG/L
Acetone	67-64-1	96 HR LC50 LEPOMIS MACROCHIRUS 8300 MG/L 96 HR LC50 ONCORHYNCHUS MYKISS 4.74 - 6.33 ml/l 48 HR EC50 DAPHNIA MAGNA 12600 - 12700 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name:
UN1993, Flammable liquids, n.o.s., (Acetone, Petroleum ether); CL 3; PG II

Air - IATA Proper Shipping Name:
UN1993, Flammable liquids, n.o.s., (Acetone, Petroleum ether); CL 3; PG II

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Petroleum Ether	8032-32-4	No	No	No	No	No
Acetone	67-64-1	No	No	5000 lb final RQ; 2270 kg final RQ	No	No

Section 16 Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health